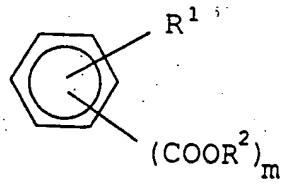
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) Composition for the manufacture of polyaniline films, made up of a solution, in an organic solvent, of a polyaniline in base emaraldine form and of a dopant formed of a sulphonic or phosphonic acid, meeting the formula:

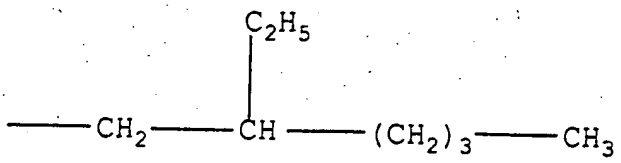


(I)

in which:

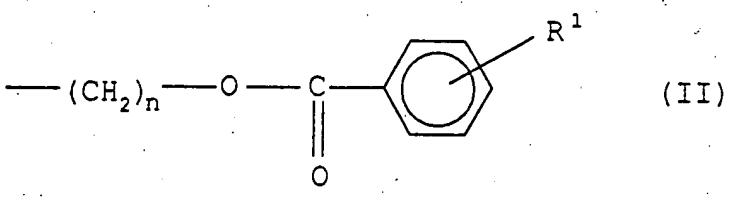
- R^1 represents $-SO_3H$ or $-PO_3H_2$
- R^2 ~~[is a linear or branched alkyl group]~~

represents:



and m equals 1 or 2, or

– R^2 is a group having the formula:

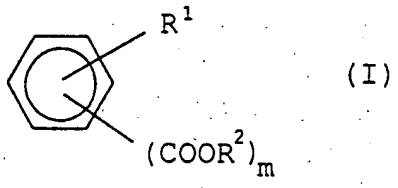


(II)

in which R^1 [~~is such as defined above~~] represents $-SO_3H$ or $-PO_3H_2$ [~~and~~], n is a whole number ranging from 1 to 16, and m equals 1 [, ~~with the exception of the di (n-amyl), di (n-decyl), di (butoxy-2-ethyl) and di [2-(butoxy-2-ethoxy) ethyl] esters of 5-sulphoisophtalic acid and of the esters of 5-sulphoisophtalic acid and rocanol~~].

Claim 2. (currently amended) Composition for the manufacture of a conductor composite material containing:

- an organic solvent,
- a polyaniline in base emeraldine form,
- a doping agent formed of a sulphonic or phosphonic acid, meeting the formula:

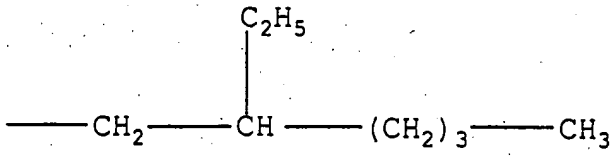


(I)

in which:

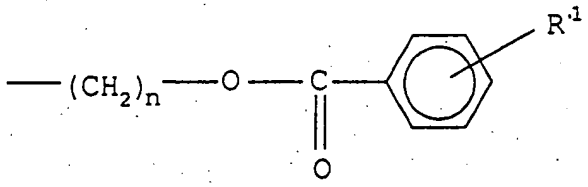
- R^1 represents $-SO_3H$ or $-PO_3H_2$,
- R^2 [~~is a linear or branched alkyl group~~]

represents:



and m equals 1 or 2, or

- R^2 is a group having the formula:



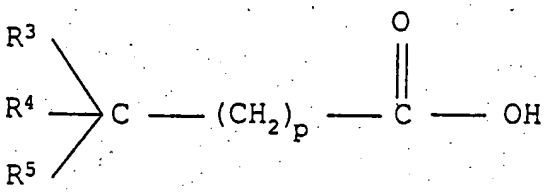
(II)

in which R^1 [~~is such as defined above~~] represents $-SO_3H$ or $-PO_3H_2$ [~~and~~] , n is a whole number ranging from 1 to 16, and m equals 1,

- an insulating polymer, and

- a plasticizer for the insulating polymer.

Claim 3. (currently amended) Composition according to claim 1, in which the solvent is a halogenated derivative of a carboxylic acid having the formula:



(V)

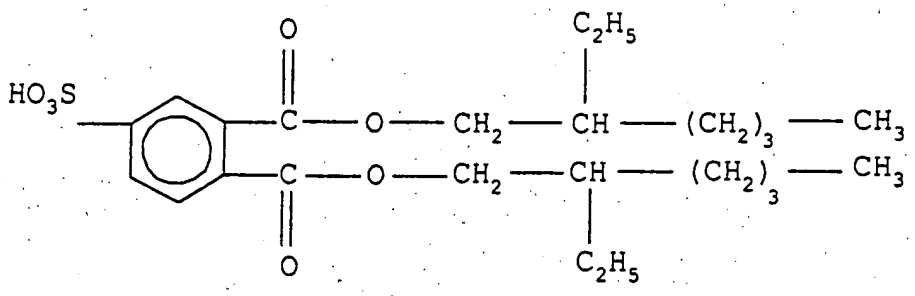
In which R^3 , R^4 and R^5, which [~~may be~~] are identical or different, represent H or a halogen atom chosen from among F, Cl and Br, at least one of R^3, R^4 and R^5 representing a halogen atom, and p equals [~~0, 1~~] 0, 1 or 2.

Claim 4. (original) Composition according to claim 3, in which the solvent is chosen from among dichloroacetic, trifluoroacetic, difluoroacetic, chlorodifluoroacetic, 2-chloropropionic, 2-bromobutyric and 2, 2-dichloro-proprionic acids.

Claim 5. (original) Composition according to claim 1, in which the sulphonic or phosphonic acid meets formula (I) in which m equals 2.

Claim 6. (original) Composition according to claim 1, in which the sulphonic or phosphonic acid meets formula (I) in which m equals 1.

Claim 7. (original) Composition according to claim 1, in which the sulphonic acid meets the formula:



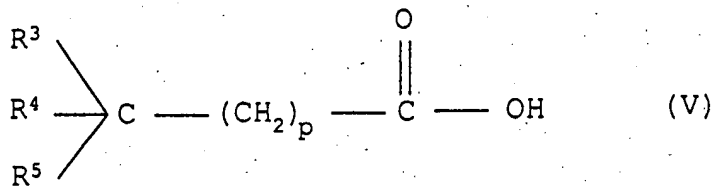
(III)

Claim 8. (original) Composition according to claim 7, in which the solvent is dichloro-acetic acid.

Claim 9. (original) Composition according to claim 1, in which the polyaniline and doping agent contents in the solution are such that the molar ratio of the doping agent to the polyaniline in base emeraldine form lies within the range of 0.4 to 0.6.

Claim 10. (original) Composition according to claim 1, in which the polyaniline content of the solution is 0.1 to 1% by weight.

Claim 11. (currently amended) Composition according to claim 2, in which the solvent is a halogenated derivative of a carboxylic acid having the formula:



(V)

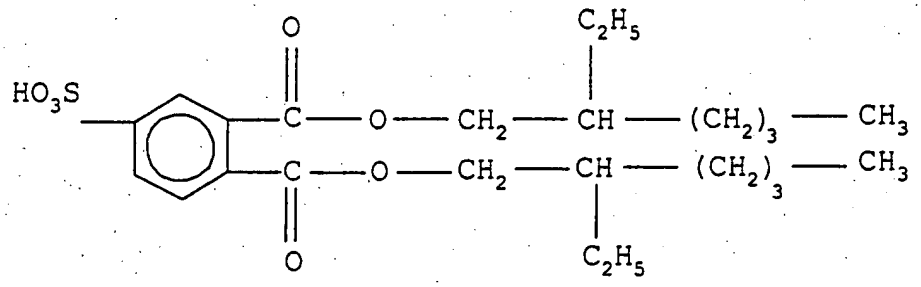
In which R^3, R^4, and R^5, which [~~may be~~] are identical or different, represent H or a halogen atom chosen from among F, Cl and Br, at least one of R^3, R^4, and R^5 representing a halogen atom, and p equals [~~0.1~~] 0, 1 or 2.

Claim 12. (original) Composition according to claim 11, in which the solvent is chosen from among dichloroacetic, trifluoroacetic, diflouroacetic, chlorodifluoroacetic, 2-chloropropionic, 2-bromobutyric and 2,2-dichloro-proprionic acids.

Claim 13. (original) Composition according to claim 2, in which the sulphonic or phosphonic acid meets formula (I) in which m equals 2.

Claim 14. (original) Composition according to claim 2, in which the sulphonic or phosphonic acid meets formula (I) in which m equals 1.

Claim 15. (original) Composition according to claim 2, in which the sulphonic acid meets the formula:



(III)

Claim 16. (original) Composition according to claim 15, in which the solvent is dichloro-acetic acid.

Claim 17. (original) Composition according to claim 2, in which the polyaniline and doping agent contents in the solution are such that the molar ratio of the doping agent to the polyamine in base emeraldine form lies within the range of 0.4 to 0.6.

Claim 18. (original) Composition according to claim 2, in which the polyamine content of the solution is 0.1 to 1% by weight.

Claim 19. (original) Composition according to claim 2, in which the insulating polymer is chosen from among polystyrene, polymethylmethacrylate, cellulose polymers, polyvinylchloride, polycarbonates, polyesters and polyurethanes.

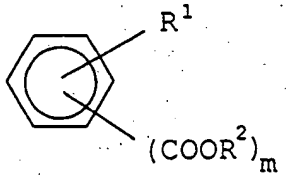
Claim 20. (currently amended) Composition according to claim 2, in which the plasticizer is chosen from among the diesters of ~~phtalic~~ phthalic acids, the diesters of phtalic acids, the diesters of dicarboxylic acids and the triesters of phosphoric acid.

Claim 21. (original) Method for manufacturing a conductor composite material containing a polyaniline, characterized in that it comprises the following steps:

- preparing a composition according to claim 2, and
- forming the conductor composite material from said composition by evaporation of the solvent.

Claim 22. (original) Method according to claim 21, characterized in that the composition is prepared by mixing a first solution of polyaniline and dopant in the solvent with a second solution in the same solvent of the insulating polymer and of the plasticizer.

Claim 23. (currently amended) Electricity conductive composite material containing a matrix of insulating polymer in which a conductor polyaniline is distributed doped with a sulphonic or phosphonic acid, meeting the formula:

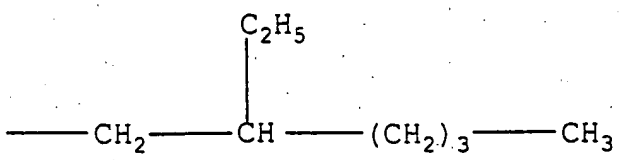


(I)

in which:

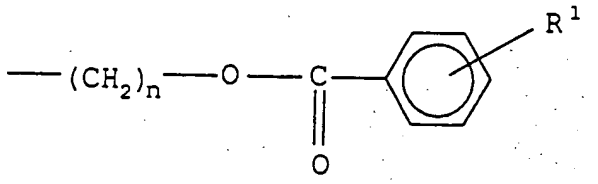
- R^1 represents $-SO_3H$ or PO_3H_2,

- R^2 [~~is a linear or branched alkyl group~~] represents:



and m equals 1 or 2, or

- R^2 is a group having the formula:



(II)

in which R^1 [~~is such as defined above~~] represents $-SO_3H$ or PO_3H_2 [~~and~~], n is a whole number ranging from 1 to 16, and m equals 1, and a plasticizer for the insulating polymer.

Claim 24. (original) Composite material according to claim 23, in which the insulating polymer is polymethylmethacrylate.

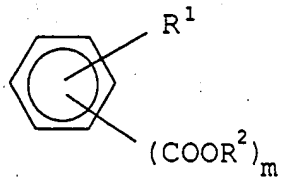
Claim 25. (original) Composite material according to claim 23, which contains:

a) 0.06 to 10% by weight polyaniline and dopant,

b) 545 to 99.9% by weight insulating polymer, and

c) up to 44.94% by weight of plasticizer for the insulating polymer.

Claim 26. (currently amended) Polyaniline film, doped with a suplphonic or phosphonic acid, meeting the formula:



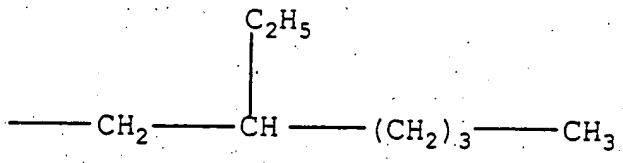
(I)

In which:

- R^1 represents $-SO_3H$ or PO_3H_2,

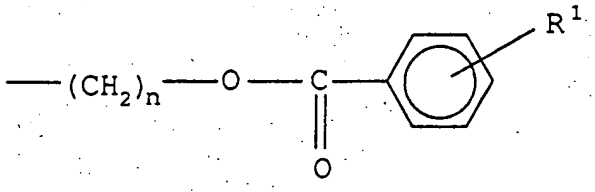
- R^2 [~~is a linear or branched alkyl group~~]

represents:



and m equals 1 or 2, or

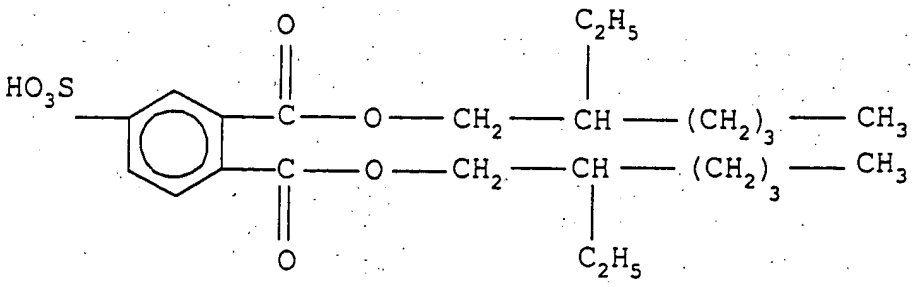
- R^2 is a group having the formula:



(II)

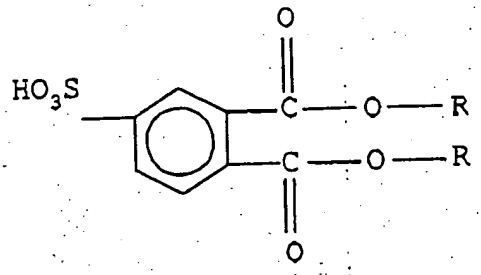
in which R^1 [~~is such as defined above~~] represents $-SO_3H$ or PO_3H_2 [~~and~~], n is a whole number ranging from 1 to 16, and m equals 1, [~~, with the exception of the di (n-amyl), di (n-decyl), di (butoxy -2-ethyl) and di [2- (butoxy -2-ethoxyl) ethyl] esters of 5 sulphoisophtalic acid and the esters of 5 sulphoisophtalic acid and rocanol~~] .

Claim 27. (original) Polyaniline film according to claim 26, doped with sulphonic acid having the formula:



(III)

Claim 28. (new) Composition for the manufacture of polyaniline films, made up of a solution, in an organic solvent, of a polyaniline in base emeraldine form and of a dopant formed of a diester of 4-sulfophthalic acid, having the formula:



in which:

-R represents a group selected among the n-pentyl, n-octyl, n-decyl, n-dodecyl, 2-ethylhexyl, butoxyethyl and butoxyethoxyethyl groups.